

# Bushnell®



## **ONIX 110**

### ***GPS NAVIGATOR***

### **Quick Start Guide**

## Warnings and Notices

### **GPS System & Map Data Accuracy Notice:**

The Global Positioning System (GPS) is operated by the government of the United States, which is solely responsible for its accuracy and maintenance. The system is subject to changes which could affect the accuracy and performance of all GPS equipment.

All map data sources contain some level of inaccuracies or incomplete data. Bushnell strives to provide the most recent map information at a reasonable cost.

### **Warning:**

This device is intended as a supplemental handheld navigation aide only. The user assumes all responsibility associated with the use of this product. It must not be used for any purpose requiring precise measurement of location, direction, distance, velocity or topography. This device should not be used for any aircraft navigation applications.

### **Vehicular Use Notice:**

Bushnell is committed to the safe and responsible enjoyment of the outdoors.

Do not use this product while driving. An accident can result in property damage, injury or death if the operator fails to practice prudent driving practices. It is the sole responsibility of the driver of any vehicle to operate the motor vehicle in a safe manner. Information from the GPS unit can distract the operator of a motor vehicle. It is unsafe to operate the controls of the GPS unit while operating a motor vehicle. If used in a motor vehicle, it must not be used by the operator of the motor vehicle. If it is used in a motor vehicle it must be mounted in a manner such that it does not distract the operator, does not interfere with the operator's field of view, and does not block or interfere with the air bags or other safety mechanisms of the motor vehicle.

### **Software License Agreement**

BY USING THE ONIX, YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS OF THE FOLLOWING SOFTWARE LICENSE AGREEMENT. PLEASE READ THIS AGREEMENT CAREFULLY.

Bushnell grants you a limited license to use the software embedded in this device (the "Software") in binary executable form in the normal operation of the product. Title, ownership rights and intellectual property rights in and to the Software remain with Bushnell.





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## Package Contents

Before you start using your ONIX 110 Handheld GPS Navigator, make sure that your package contains the following items. If anything appears to be missing or damaged, contact your local Bushnell dealer or distributor for a replacement.

ONIX 110 Handheld GPS Navigator	Documentation (Quick Start Guide)
	
Software CD-Rom inc. PC Companion/USB Driver/ PDF Manual	AC Charger / USB cable *
	

\*The USB cable is used both for battery charging (by connecting the AC Charger), and data transfer between the ONIX 110 and a computer (Windows PC only).

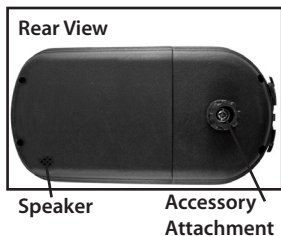
## Parts Guide

### Front View



No.	Item	Function
1.	Menu/ Backlight	Press once to display the OSD menu. Press twice to display the Main Features menu. Press and hold to turn the backlight on/off.
2.	Zoom Out	Press to zoom out on a map page. Hold for 3 seconds to hide or display roads, rivers, etc.
3.	LCD Screen	Displays the map page, satellite information, OSD menus etc.

No.	Item	Function
4.	Four-way Navigation Keys	<b>Up arrow:</b> Press to move the cursor up in OSD menus or on the map page. <b>Down arrow:</b> Press to move the cursor down in OSD menus or on the map page. <b>Left arrow:</b> Press to move the cursor left in the OSD menus or on the map page. <b>Right arrow:</b> Press to move the cursor right in the OSD menus or on the map page.
5.	Power/ ESC/ Page	Press and hold to turn the power on/off. Press to exit (ESCape) the OSD menu. Press to toggle between the map page and the compass page.
6.	Zoom In	Press to zoom in on the map page. Hold for 3 seconds to hide or display points of interest (POIs).
7.	OK/Enter	Press to toggle between the map page and navigation mode. On the menu page, press to confirm your selection.



## Charging the ONIX 110 Battery

Before using your ONIX 110 for the first time, the internal rechargeable battery must be fully charged, via the USB port on the unit. Connect the supplied USB cable to the ONIX 110, then connect the other end of the cable to the AC Charger. Plug the charger into an AC wall outlet, and allow the unit to charge until the battery charge icon on the unit's display indicates a full charge (this typically takes 4-5 hours). Once fully charged, disconnect the AC charger and USB cable, storing them for future use. The USB cable is also used for data transfer between the ONIX 110 and a PC computer, using the PC Companion software included on the CD-Rom (see "Installing the PC Companion" on pg. xx).

## Turning On For the First Time

To turn on your ONIX 110 Handheld GPS Navigator, press and hold the **Power** button for two seconds. The product info page is displayed, then the **Mode Selection** menu appears. Use the navigation keys to select a mode (see "Using the ONIX 110 Modes" on the next page) and press the OK button. Press the **Menu** button twice and select **Satellite**. The unit will start acquiring satellite information. **Note:** When the ONIX 110 is used indoors, the device may not receive a sufficient GPS signal and a warning message will appear on the screen. This warning message does not go off unless you select "**GPS Off**" in the Menu.

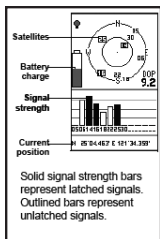


Fig. 1

## Acquiring Satellite Information

The satellite page displays information obtained from the GPS satellites (Fig. 1). The upper half of the screen displays the satellites found in the vicinity and their respective numbers.

The vertical bars on the bottom of the screen show the signal strengths acquired from the satellites. The GPS requires at least 4 satellites to determine its position, then the position coordinates are displayed at the bottom of the screen. **Note:** For optimal performance, the ONIX 110 must have its position determined by the satellites.

## Viewing the Map Page

Press the Page button to toggle between the map page and the navigation info tabs page. On the map page, a triangle icon indicates your current location and the "house" icon indicates your home location. Press the Menu button to start navigation.

When navigation is initiated, a route between the Home location and your current location is displayed on the screen. You can refer to the route to help you go back to your Home location. Press the **ESC** button to return to the map page.

### Zooming In/Out

Press the +/- buttons to zoom in/out and increase/decrease the map scale. Or, select **Map Zoom Scale** in the Menu, adjust it with left/right navigation keys, then press OK. The ONIX 110 features eight zoom levels.

### Turning on the Backlight

The ONIX 110 is equipped with a built-in backlight for use in poor lighting conditions. Press and hold the **Menu** button to turn the backlight on or off. The backlight status icon is in the bottom left corner of the screen.

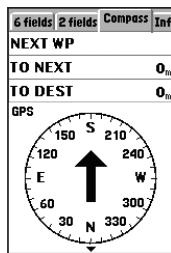


Fig. 2

### Viewing the Navigation Info Page (Fig. 2)

The nav info page displays information about the direction in which you are moving, the time and distance required to reach the next waypoint, and your destination. The inner needle of the compass points in the direction in which you are moving. The outer small pointer indicates north. To view the compass page, press the **ESC** button once on the map page. **NOTE:** If a navigable route is not available, the compass needle and all field values are not visible.



Fig. 3

### Using the ONIX 110 Modes

The ONIX 110 features four modes: **Simple**, **Advanced**, **GeoCaching**, and **Sports** modes. Press the **Menu** button twice and select **Main Menu** (Fig. 3)-the **Mode Selection** screen will appear (Fig. 4). Use the navigation keys to select the mode you want to use and press **OK** to enter the chosen mode. **Note:** this QuickStart Guide covers the basic operation of simple and advanced modes. Please refer to the full manual on the CD-Rom for a detailed description of the GeoCaching and Sports modes.

### Using Simple Mode

In Simple mode, only basic GPS functions are available. You can set a home location before you begin traveling in an unfamiliar area. You can then follow back through the route you traveled, using the navigation function to return to your home location. Advanced mode also allows you to search for objects, set waypoints and create trail logs.



Fig. 4

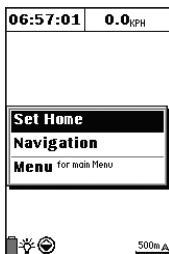


Fig. 5

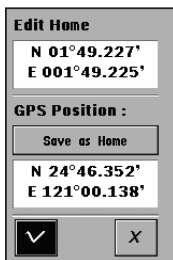


Fig. 6

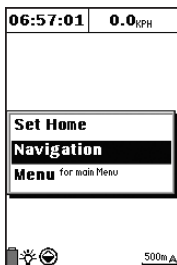


Fig. 7

## Setting the Home Location

To set your Home Location:

1. In Simple mode, press the **Menu** button to display the menu options.
2. Use the navigation keys to select **Set Home** and press **OK** (Fig. 5).
3. You can set your home location in one of the following ways (Fig. 6):
  - Press the navigation keys to highlight **Edit Home** and press **OK**. Use the navigation keys to set the home position manually.
  - Select **Save as Home** by pressing the navigation keys. Your home location is automatically set to the location acquired from the GPS.
4. Use the navigation keys to highlight  $\checkmark$  to save your settings. When a new home location is set, any previously saved "Home" will be deleted. A warning message prompts you to confirm the new setting.

## Using the Navigation Feature

After setting your home location, you can start navigation and begin recording trail logs. Press OK to clear the log history and start recording a new log. The navigation log recording is automatically updated every 50 meters.

To turn on the Navigation function:

1. In Simple mode, press the **Menu** button to display the OSD menu.
2. Use the navigation keys to select **Navigation**. (Fig. 7) The device will stop recording the log and a tracking line will be displayed on the screen.
3. The arrow points in the direction to your home location, and displays the time and distance before you reach it.
4. Press the **Page** button to go to the Navigation page. A route between the home location and your current location is displayed. Refer to this route to return to your home position.

## Using Advanced Mode

In Advanced mode, you can search for objects step by step or search for a "nearest" object. And you can set waypoints and create routes for important locations and store them in the ONIX 110 for future reference.



## Searching for an Object (Points Of Interest)

You can search for objects including roads, hotels, banks, restaurants, etc. using this feature. Read the following sections to learn how to use the search functions.

1. From the map page, press the **Menu** button and use the navigation keys to select the **Find/Go To** option and press **OK** (Fig. 8), then **Select A Region** using the navigation keys, and press **OK** (Fig. 9).
2. **Select A Type** of object using the navigation keys and press **OK** (Fig. 10), then **Select A Name** of the object. Use the navigation keys to move the highlight to the search bar and press **OK**, then use the up/down keys to select the object and press **OK** to go to the map page. You will now see the object on the map page.



Fig. 8

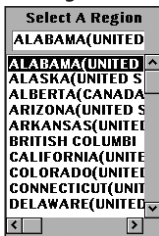


Fig. 9



Fig. 10

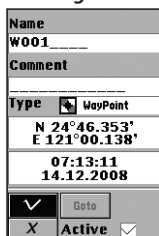


Fig. 11

## Nearest Search

You also can use the nearest search function to search the nearest object. Read the following sections to learn how to search the nearest object you want to find.

1. From the map page, press the **Menu** button, select **Nearest POI**, and press **OK**.
2. **Select A Type** first, using the navigation keys, then press **OK**. Select the **Distance** then **Select A Name** with the navigation keys and press **OK**. Use the up/down keys to highlight your selection and press **OK**. You will then see the object on the map page.

## Creating Waypoints

You can freely create, name and save waypoints anywhere on the map, to mark any location you like for future reference and navigation. To create a new waypoint from the map page:

1. Position the cursor at the location where you want to set the waypoint (using the navigation keys), then press and hold the **OK** button. The new waypoint page will be displayed (Fig. 11).
2. Press the navigation "**Up**" key to highlight the name and/or comment fields, press **OK**, then the navigation "**Down**" key to use the text entry window. Enter text/numbers, using the navigation keys to select a character, then press **OK** to enter it and move to the next space. When finished, press the **ESC** (Power) button twice to exit the text entry window and return to the Name or Comment field.
3. Highlight the  $\checkmark$  option and press **OK** to save changes

## Creating Waypoints (*continued*)



Fig. 12



Fig. 13



Fig. 14



Fig. 15

and view your new waypoint on the map, or highlight GOTO and press **OK** to create an auto-route from your current location to the waypoint.

## Modifying Waypoints

To modify an existing waypoint:

1. From the map page, press the **Menu** button, select **My Waypoints**, and press **OK**. A list of all waypoints is displayed on the screen.
2. Highlight the waypoint you want to modify and press the **Menu** button, select **Edit** from the drop down box and press **OK** (Fig. 12).
3. Use the navigation keys to highlight the field you want to modify and make the changes as required. Highlight the **✓** option and press **OK** to save changes.

## Deleting Waypoints

To delete an unused waypoint:

1. From the map page, press the **Menu** button, select **My Waypoints**, and press **OK**. A list of all waypoints is displayed on the screen. The active waypoint which is currently used for navigation has an asterisk (\*) sign next to it.
2. Highlight the waypoint you want to delete and press the **Menu** button, then select **Delete** (Fig. 13) to delete only the active waypoint (or **Delete All** to delete all waypoints) from the drop down box and press **OK** to confirm.
3. A message prompts you to confirm the action. Press **OK** to delete or the **ESC** (Power) button to cancel.

## Using Routes

Routes can be created manually, using any waypoints you created earlier. A route is a path connecting two or more waypoints or objects.

## Creating a Route

To create a route using previously created waypoints:

1. In Advanced mode, press the **Menu** button, select the **My Routes** option and press **OK** (Fig. 14). A list of routes will be displayed on screen. Press the **Menu** button and select **New** (Fig. 15).
2. A new route is created and its information is displayed on screen. Use the navigation keys to highlight each field to

input information such as name, comment, etc.

3. Highlight the waypoints field (Fig. 16). Press the **Menu** button and select from the following options to create a route:

- Select **Add WP** to add existing waypoints to the route (Fig. 17).
- Select **Insert WP** to insert a waypoint starting at the selected location on the route.

4. You can set the priority of the waypoints on the route by selecting the waypoint and pressing **OK**. The order of the waypoints on the route is displayed in the column to the right of the waypoint names.

5. Press the **Page** button to highlight the waypoints field, highlight the ☒ option and press **OK** to save changes.

6. Select the route you just created and press the **Menu** button to view the menu options. Highlight the **Set NAV** option (Fig. 18) and press **OK** to confirm. The selected route is activated and the ONIX 110 switches to navigation mode.

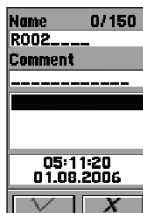


Fig. 16



Fig. 17

## Editing Routes

You can modify or delete all the routes that you created as required.

To edit routes:

1. In Advanced mode, press the **Menu** button and select **My Routes**. A list of all the routes is displayed. The route being navigated has an asterisk next to it.

2. Press the **Menu** button to display the routes menu (Fig. 19). Select from the following options to modify the routes as required:

- Select **Edit** to modify the chosen route.
- Select **Delete** to delete the chosen route
- Select **Delete All** to delete all routes.
- Select **Set NAV** to activate navigation mode.
- Select **Cancel NAV** to disable navigation mode.



Fig. 18



Fig. 19

## Creating a Trail Log

The ONIX 110 also features a "trail log" function that records information about your trip to help you find and follow the same path or trail in the future.

To create a trail:

1. In Advanced mode, press the **Menu** button, highlight **My Trails** and press **OK** (Fig. 20). Under the **My Trails** tab, highlight the **Trail** field and press **OK** to display the drop down menus.
2. Select from the following options:



Fig. 20

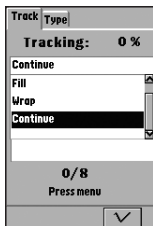


Fig. 21



Fig. 22

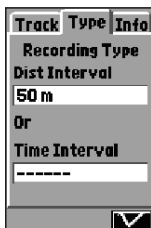


Fig. 23

## Creating a Trail Log (continued)

- Select **Off** to disable logging of the trail.
  - Select **Fill** to save trails with no more than 2500 trail points.
  - Select **Wrap** to create trails in a cyclical manner. After a trail log with 2500 track points is saved, new trail points are saved by overwriting the old trail points starting from 0.
  - Select **Continue** (Fig. 21) to create a single continuous trail log of all trail points. You can save up to 8 continuous trail logs.
3. Press the **Menu** button to view the trail log menu and select from the following options:
    - Select **Clear Trail** to clear the current trail points (Fig. 22).
    - Select **Save Trail** to save the current trail log to the system's internal flash memory. Up to 8 trail logs can be saved.
    - Select **Trail Distance** to calculate the distance from the start point to the end point.
    - Select **Trail Area** to calculate the trail area from the start point to the end point.
    - Select **Delete** to delete the selected trail log.
    - Select **Show ON** to display the trail log.
  4. Under the **Type** tab (Fig. 23), follow the steps below to select the tracking method using distance or time intervals:
    - Highlight the **Dist Interval** field and press **OK**, select the distance interval and press **OK** to save your settings (select the ----- option if you do not wish to specify the distance interval).
    - Highlight the **Time Interval** field and press **OK**, select the time interval and press **OK** to save your settings (select the ----- option if you do not wish to specify the time interval).
  7. Use the **Down** navigation key to highlight the **✓** option and press **OK** to save changes.

### NOTE:

- If you select a value for both the distance interval and time interval, a trail point is recorded when either of the interval value is reached.
- To ensure the integrity of data structure, the trail log cannot be saved into non-volatile memory when battery is low. Make sure the battery charge is adequate to ensure data is retained.

- When saving trail logs, select the **Continue** option and the trail log setting will automatically be set to Show ON. If you select **Wrap** or **Fill**, the trail log setting will automatically be set to Show Off.

## Viewing Trail Log Information

To view trail log information:

1. In Advanced mode, press the **Menu** button, highlight **Trail Logs** and press **OK** to confirm.
2. Under the Info tab (Fig. 37) use the navigation keys to view the distance and the area traveled for the selected trail log.

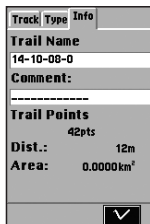


Fig. 24

## Using the Shortcut On Feature

The Shortcut On features allows you to create a “short cut” from your current location to the location of the cursor on the map page.

To enable the Shortcut On feature:

1. On the map page, press **OK** and the cursor will change to a cross icon. Move the cursor to the location you want to go to.
2. Press the **Menu** button to display the menu options, select **Shortcut On** and press **OK** (Fig. 25). A route between your current location and the location of your cursor is displayed on the map.
3. Press the **Menu** button and select **Shortcut Off** to disable it.



Fig. 25

## Using the Set Location Feature

The Set Location feature enables you to quickly find a specified location that you use frequently. The map page will automatically go to this location so you don't have to search for it, saving you time.

To enable the Set Location feature:

1. From the map page, press **OK** and the cursor will change to a cross icon. Move the cursor to the point you wish to set as a frequently used location.
2. Press the **Menu** button, select **Set Location On** and press **OK** (Fig. 26). You will automatically return to the map page.
3. Press **OK** and the cursor will move to the location you just set.



Fig. 26

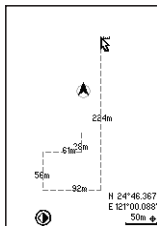


Fig. 27

## Using the Measure Distance Feature

The Measure Distance feature enables you to measure the distance from your current position to a specified destination. To enable the measure distance function:

1. On the map page, press the **Menu** button, select **Measure Dist On** and press **OK**. A ruler appears at the cursor point on the map screen (Fig. 27). Use the navigation keys to move to your destination and press **OK**.
2. The distance between the start point and end point is displayed.

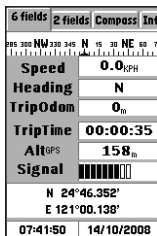



Fig. 28

## Viewing Trip Status

To view trip information such as your speed, direction, trip time, and so on:

1. From the map page, press the **Page** button to view the trip status information.
2. Use the navigation keys to toggle between the **6 fields** (Fig. 28) and **2 fields** (Fig. 29) tab views, and choose the information you want to see:
  - **Speed**: shows the speed at which you are traveling
  - **Heading**: shows the tracking direction
  - **TripOdom**: shows the distance traveled so far
  - **TripTime**: shows the time elapsed
  - **Alt<sup>GPS</sup>**: shows the altitude of your current location
  - **Signal**: shows the current signal strength of the device

### NOTE:

The  icon at the top of the trip status page indicates the location whose information is being displayed on the map in navigation mode. The icon cannot be selected or modified.

## Resetting Trip Data

Resetting trip data will reset the value of Trip Odom and Trip Time to zero.

To set the trip data and display new data:

- On the trip status page, press the **Menu** button, select **Trip Reset**, and press **OK** to confirm (Fig. 30). The trip status data is reset to default settings.



Fig. 29



Fig. 30

## Changing the Fields

You can specify the items to be displayed in the trip status fields.

To change the field items:

1. On the trip status page, press the **Menu** button, highlight **Change Field**, and press **OK** (Fig. 31). Select the field you

want to change and press **OK** to view the available options (Fig. 32):

- **Speed**: shows the speed at which you are traveling
- **Heading**: shows the tracking direction
- **Trip Odom**: shows the distance traveled so far
- **Trip Time**: shows the time elapsed
- **Alt<sup>GPS</sup>**: shows the altitude of your current location
- **Signal**: shows the current signal strength of the device
- **Speed<sup>Avg.</sup>**: shows the average speed
- **Speed<sup>Max.</sup>**: shows the maximum speed
- **To Dest.:** shows the distance to your destination

2. Use the navigation key to toggle between the **6 fields** and **2 fields** (Fig. 33) tab views, and repeat step 1 to change the other fields accordingly.

## Moving to the Next Waypoint

On the compass page, you can jump to the next waypoint and view the direction and distance information with ease.

To change to the next waypoint:

1. From the map page, press the **Page** button and select the **Compass** tab.
2. The compass shows the direction and distance to the next waypoint. Press the **Menu** button to display the menu options, select **Change Next WP** and press **OK** (Fig. 34).
3. A list of all waypoints on the route is displayed on screen (Fig. 35). Select the next waypoint to be displayed and press **OK**. The selected waypoint information is then displayed on the compass page.

## Adjusting the User Settings

The **User Settings** menu enables you to customize the ONIX 110 according to your needs. To view the system settings, do the following:

1. Press the **Menu** button twice to display the main menu and scroll to the **System Settings** option, then press **OK** to select the option and change the system settings.
2. There are four tabs in the System Settings menu – **Set 1**, **Set 2**, **Set 3**, and **Time**. Please refer to the full manual pdf on the CD-Rom for details on changing these user settings (*Navigation Mode, Map Direction, Display Units, DMS Format, Backlight, Beeper, Startup Page, Time, etc.*)



Fig. 31

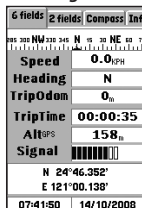


Fig. 32



Fig. 33



Fig. 34



Fig. 35

## Transferring Data

You can transfer maps, waypoints, routes, trails, and fonts to and from a PC using the Connect to PC feature.

## System Requirements (for the PC Companion Software)

Make sure that the host PC (a Mac version is not available) meets the following system requirements:

- CPU: 500 megahertz (MHz), Pentium III processor or higher
- Memory: 64 megabyte (MB) RAM or higher
- Operating system: Windows ME, 2000, XP, or Vista
- Hard disk: Min. 20 MB available
- Other: CD-ROM drive, USB Port, 1024x768 or higher resolution monitor

## Installing the CD-Rom Software (PC Companion)

**Install the software before connecting the ONIX 110 to your computer.** Insert the supplied PC Companion CD-ROM into your PC's CD Drive. When the "Getting Started with your ONIX 110 GPS" screen opens, click anywhere in the "PC Companion" box. Follow the on-screen directions to install the software on your PC, including the USB driver for the device, and US/Canadian base maps.



Click here to install software      Click here for full manual (pdf)

## Making Connections

To connect the ONIX 110 to your laptop, use the USB cable provided in the package. Connect the smaller end of the cable to the data port on the device and connect the other end of the cable to a free USB port on your laptop or desktop computer.

*NOTE: Make sure that the USB cable is working properly and connected correctly to the ONIX 110 and the PC. If it is not, an error message will be displayed on the PC's screen. You must connect the ONIX 110 to the PC and use the PC Companion program to upload or download data. Both devices are needed to transfer data.*

## Starting Data Transfer

To transfer data, do the following:

1. Press the **Menu** button twice to display the main menu.



2. Scroll to the **Connect to PC** option and press **OK**.
3. Press the **Menu** key as prompted.
4. Choose the appropriate option from those displayed on the screen as follows:
  - **PC->GPS Map**: to transfer map from a PC to the ONIX 110C.  
See Downloading Map on page 65.
  - **PC->GPS My Trails**: to transfer trail logs from a PC to the ONIX 110. See "Downloading Trail Logs".
  - **PC->GPS Wp&Rt**: to transfer waypoints and routes from a PC to the ONIX 110. See "Downloading Waypoints and Routes".
  - **PC->GPS Geoc**: to transfer Geocaching coordinates from a PC to the ONIX 110. See "Downloading Geocaching Coordinates".
  - **GPS->PC My Trails**: to transfer trail logs from the ONIX 110 to a PC. See "Uploading Data".
  - **GPS->PC Wp&Rt**: to transfer waypoints and routes from the ONIX 110 to a PC. See "Uploading Data".
  - **GPS->PC Spt Log**: to transfer sports records from the ONIX 110 to a PC. See "Uploading Data".

To transfer data to your laptop or PC, use the PC Companion program you installed. The following sections provide more information about using this utility.

### Using the PC Companion Program

After connecting the ONIX 110 to the PC (see "Making Connections") and setting it up with the Connect to PC menu (see "Uploading Data") to select the type of data transfer, run the PC Companion program to start data transfer. Refer to the following sections to learn more about the software and how to transfer different types of data.

Use the following tools in the PC Companion utility to view and manage the map files as follows:

- **Enlarge the map scale**
  1. Click Tools | Zoom In
  2. Use wheel of mouse directly
- **Reduce the map scale**
  1. Click Tools | Zoom Out
  2. Use wheel of mouse directly
- **View different areas of the map**
  1. Click Tools | Move
  2. Use left bottom of mouse to drag map
- **Show the names of roads or interesting points**
  1. Click Tools | Arrow
  2. Move mouse

## Features

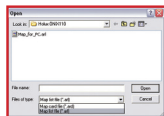
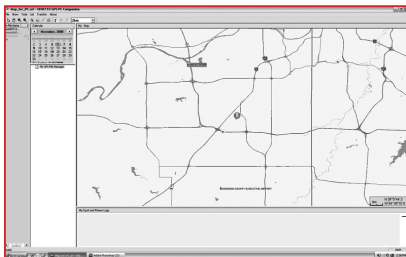
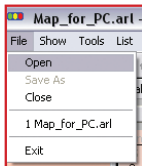
You can use the menu bar to perform various tasks from the main program window. The following sections describe how to use the GPS PC Companion menu items. You can also use the toolbar icons to carry out various functions. Move your mouse over the toolbar icons to view a tool-tip about the icon and learn what each icon represents.

### File Menu

Click **File | Open** to open map card files (\*.ard) or map list files (\*.arl, which contains a list of several map card files).

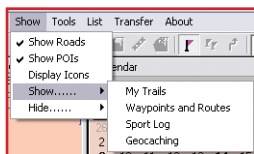
Select a map list file (\*.arl) from the File Open menu and click **OK**.

The selected map file opens and the roads and points of interests are displayed on the map.



### Show Menu

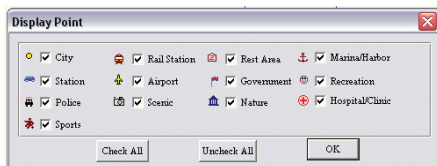
Click **Show** and choose the item that you want to display on the map. Move the cursor over the map and hold it over a road or any other point of interest to view information about the location. The exact latitude, longitude, name of the road, district, and name (if any) of the location are displayed next to the cursor.



Use the following items on the Show menu as follows:

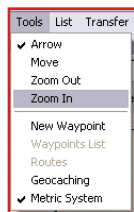
- **Show Roads** – displays all roads on the map.
- **Show POIs** – displays points of interest on the map.
- **Show POIs Name** – displays the names of the points of interest
- **Display Icons** – enables you to choose which points of interests are displayed on the map. You can select various types of locations (see list below) to be displayed on the map by selecting the required check boxes.
- **Show/Hide | My Trails** – displays or hides details of a trail log (\*.trl).
- **Show/Hide | Waypoints and Routes** – displays or hides routes (\*.wpr) created from waypoints on the map.

- **Show/Hide | SportLog** – enables or disables the display of sports logs (\*.spt).
- **Show/Hide | Geocaching** – enables or disables the display of geocaching (\*.geo).



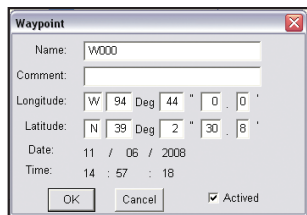
## Tools Menu

The Tools menu enables you to view the map, move across the map, search for locations, and so on.

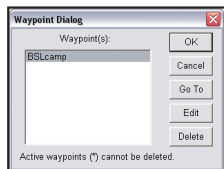


- **Arrow** – Cursor becomes an arrow. Move the cursor to a road or point of interest to view information about it.
- **Move** – Cursor becomes a hand and allows you to pan across the map. Press the left mouse button to drag and move the map. The cursor turns into a closed fist when the left mouse button is pressed.
- **Zoom out** – Cursor changes to a magnifier with a minus (-) sign in the center. Click to zoom out and view a larger area of the map.
- **Zoom in** – Cursor changes to a magnifier with a plus (+) sign in the center. Click to zoom in and view more details of the map.
- **New Waypoint** – Click the map on any location that you want to mark as a waypoint. You are prompted to specify the file in which you want to save the waypoints. Click Open to use an existing file or New to open a new file, specify the location to save the waypoint file and click Save.

A new waypoint screen appears. Enter information such as the name of the waypoint and comments for the waypoint. If required, edit the latitude and longitude of the waypoint to get an accurate location.



- **Waypoints List** – Displays a list of all the waypoints. Select a waypoint and click Go To to view the location of the waypoint on the map. Click Edit to modify the waypoint.



- **Routes** – Enables you to create and edit routes using waypoints. If no waypoints have been created, this option will not be

available. Create a route as follows:

- Click **New** under Route to create a new route. Modify the route name if desired in the Name field.
- Select a waypoint from the waypoint list and click **Add** to add it to the route. Repeat as required.
- Click **Set Navi** to create the route and display it on the map.



- **Geocaching** – Click to create or open a geocaching file. You are prompted to specify the file in

which you want to save the geocaching file. Click OPEN to use an existing file or CREATE to open a new file.

Specify the location to save the geocaching file and click Save. A dialog for a new box pops up. Enter information such as the name of the box and comments for the box. If required, edit the

latitude and longitude of the box to get an accurate location. You can also establish a new box point by importing a (\*.loc) file from the Internet.

- **Metric System** – Click to set the measurement units on the map to the metric system. Distances are shown in meters (m) or kilometers (km). If not enabled, distances are shown in miles (mi).

## List Menu

The List menu enables you to merge map card files (\*.ard) and create a list map file (\*.arl).

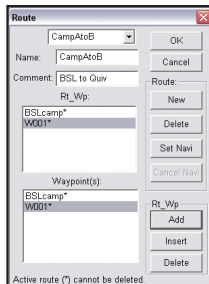
Follow these steps to use this menu:

1. Click **File | Open** to open a map file.
2. Click **List | Add An Item** to add the file to the list. The selected item is displayed in the left pane of the program window.
3. Repeat the first two steps to add the required maps. The file list in the left pane shows all the component map card files and their size. The total file size is displayed in the lower left corner.
4. After adding all the required files, a map list file (\*.arl) is created.

## Transfer Menu

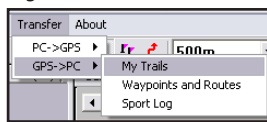
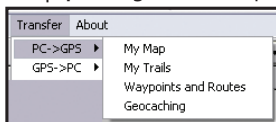
The transfer menu enables you to transfer data such as maps, trail logs, and waypoints and routes between the ONIX 110 and your host PC.

- **PC->GPS | My Map** – downloads expanded map files (\*.are) to the ONIX 110.
- **PC->GPS | My Trails** – downloads trail logs (\*.trl) to the ONIX 110.
- **PC->GPS | Waypoints and Routes** – downloads waypoint and route files (\*.wpr)



to ONIX 110.

- **PC->GPS | Geocaching** – downloads geocache files (\*.geo) to the ONIX 110.
- **GPS->PC | My Trails** – uploads trail logs (\*.trl) from the ONIX 110 to a host PC.
- **GPS->PC | Waypoints and Routes** – uploads waypoint and route files (\*.wpr) from the ONIX 110 to a host PC.
- **GPS->PC | Sport Log** – transfers sports logs from the ONIX 110 to a PC.



## The "About" Menu

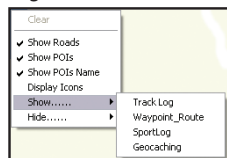
Click this menu item to view company and software version information



## Context Menu

You can view the context-sensitive menu by right-clicking anywhere in the map window. This menu provides the same options as those available from the menu bar.

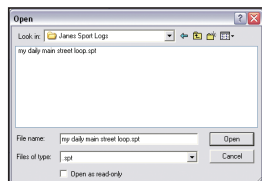
- **Show Roads** – displays all roads on the map.
- **Show POIs** – displays points of interest on the map.
- **Show POIs Name** – displays the names of the points of interest.
- **Display Icons** – enables you to choose which points of interests are displayed on the map. You can select locations such as government buildings, shopping places, restaurants and so on to be displayed on the map by selecting the required check boxes.
- **Show/Hide | Track Log** – displays or hides details of a trail log (\*.trl).
- **Show/Hide | Waypoint\_Route** – displays or hides routes (\*.wpr) created from waypoints on the map.
- **Show/Hide | SportLog** – enables or disables the display of sports logs (\*.spt).
- **Show/Hide | Geocaching** – enables or disables the display of geocaching (\*.geo).



## Viewing Sports Logs

To view the details of your sports logs, do the following:

1. Right-click anywhere in the map window and select **Show | SportLog**.
2. Specify the location of the sport log file (\*.spt) and click **Open**.
3. The sports log file opens and displays the



amount of exercise within a week.

4. Double-click a log to view the types of exercise done.

5. Click the exercise type to display the lap information. The track diagram is displayed on the upper right screen and the lap detail diagram is displayed on the screen at the lower right corner.

## Downloading Trail Logs

To download trail logs to the ONIX 110, do the following:

1. Click **Transfer | PC->GPS | My Trail** in the GPS PC Companion program.
2. The Open dialog window opens. Locate the desired trail log file (\*.trl) and click **Open** to copy the trail log to the ONIX 110.
3. The selected trail log file is copied to the internal memory of the ONIX 110 through the USB cable. The correct USB port will be detected automatically. Download status is displayed on the screen while downloading is in progress.

## Downloading Waypoints and Routes

To download waypoints and routes to the ONIX 110, do the following:

1. Click **Transfer | PC->GPS | Waypoints and Routes** in the GPS PC Companion program.
2. The Open dialog window opens. Locate the desired waypoint and route file (\*.wpr) and click **Open** to copy the waypoint and route to the ONIX 110.
3. The selected waypoint and route file gets copied to the internal memory of the ONIX 110 through the USB cable. The correct USB port will be detected automatically. Download status is displayed on the screen while downloading is in progress.

## Downloading Geocaching Coordinates

To download geocaching coordinates to the ONIX 110, do the following:

1. Click **Transfer | PC->GPS | Geocaching** in the GPS PC Companion program.
2. The Open dialog window opens. Locate the desired geocaching file (\*.geo) and click **Open** to copy the data to the ONIX 110.
3. The selected geocaching file gets copied to the internal memory of the ONIX 110 through the USB cable. The correct USB port will be detected automatically. Download status is displayed on the screen while downloading is in progress.

## Uploading Data

To upload trail logs, waypoints, and routes from the ONIX 110 to a PC, do the following after setting up the device with the Loading menu (see "Starting Data Transfer"):

1. Click **Transfer | GPS->PC | My Trails** to copy trail logs to the PC from the device.
2. Click **Transfer | GPS->PC | Wp & Rt** to copy waypoints and routes to the PC.
3. Click **Transfer | GPS->PC | Spt Log** to copy sports logs to the PC.
4. The selected data starts getting transferred to your PC. Upload status is displayed on the screen while uploading is in progress.

## NOTES

## Troubleshooting

Problems	Possible Solution
I pressed the power button but the device doesn't switch off.	Make sure that you hold the power button for two seconds to turn it off. If the unit still doesn't turn off, remove the battery or the power source for five seconds and install it again.
The unit does not respond when I try to move the cursor.	The map position may be latched. Check if the ▲ symbol is shown in the bottom right corner of the map page. If so, press and hold a direction key to unlatch the device.
What do I do to return to my current position on the map page after I have moved the map?	Check if the ▲ symbol is showing in the bottom right corner of the map page. Press the ESC button to return to your current position
The ONIX 110 fails to locate my current position.	Make sure that you are not in simulation mode. Make sure you are in an area with no obstruction such as trees or tall buildings. The ONIX 110 requires synchronization with at least three satellites to identify with your current location. Once the position has been identified, it requires at least one satellite to maintain status. If available satellite signals are too low in orbit or all in a line, it may not be able to locate your current location



## Specifications

Item	Description
Navigation	<ul style="list-style-type: none"> <li>•Waypoints: Max. 1000 waypoints with name (symbol) coordinate and remarks</li> <li>•Route: 50 reversible and editable routes up to 150 waypoints each</li> <li>•Trail log: 8 tracking logs with 2500 points each</li> </ul>
Performance	Acquisition Time: <ul style="list-style-type: none"> <li>•Cold Start: within 42 seconds</li> <li>•Warm Start: within 38 seconds</li> <li>•Hot Start: within 1 second in open sky and 15 seconds indoors</li> <li>•Update Rate: every second</li> </ul>
Accuracy	<ul style="list-style-type: none"> <li>•Position: within 5 to 25m CEP</li> <li>•Velocity: 0.1m/sec.</li> <li>•Time: <math>\pm 1\mu\text{s}</math></li> </ul>
Dynamic Conditions	<ul style="list-style-type: none"> <li>•Altitude: -1,000 to +18,000m</li> <li>•Velocity: 515m/sec.</li> <li>•Acceleration: <math>\pm 4\text{G}</math></li> </ul>
Interface	<ul style="list-style-type: none"> <li>•RS-232 (for NMEA 0183) or USB</li> <li>•Antenna: built-in patch antenna</li> <li>•Alarm: built-in buzzer for warning messages</li> </ul>
Physical	<ul style="list-style-type: none"> <li>•Dimension: 109 (L) * 59 (W) * 22.8 (H) mm</li> <li>•Weight: 130g with Li-Ion battery</li> <li>•Casing: Waterproof up to IPX6 standards</li> </ul>
Operating Temp.	<ul style="list-style-type: none"> <li>• Operating temp.: -10°C to +60°C</li> <li>• Storage temp.: -20°C to +70°C</li> </ul>

*\* The specifications are subject to change without notice.*

## FCC Compliance Statement

The ONIX complies with Part 15 of the FCC interference limits for Class B digital devices FOR HOME OR OFFICE USE. These limits are designed to provide reasonable protection against harmful interference in a residential installation, and are more stringent than “outdoor” requirements.

Operation of this device is subject to the following conditions; (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The ONIX does not contain any user-serviceable parts. Repairs should only be made by an Authorized Bushnell repair center. Unauthorized repairs or modifications could result in permanent damage to the equipment, and will void your warranty and your authority to operate this device under Part 15 regulations.

The shielded interface cable which is provided must be used with the equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

**Note:** The ONIX complies with Part 15 of the FCC interference limits for Class B digital devices FOR HOME OR OFFICE USE. These limits are designed to provide reasonable protection against harmful interference in a residential installation, and are more stringent than “outdoor” requirements.



Specifications and designs are subject to change without any notice or obligation on the part of the manufacturer.



## ONE YEAR LIMITED WARRANTY

Your Bushnell® GPS receiver is warranted to be free of defects in materials and workmanship for one year after the date of purchase. In the event of a defect under this warranty, we will, at our option, repair or replace the product, provided that you return the product with return postage prepaid. This warranty does not cover damages caused by misuse, improper handling, installation, or maintenance provided by someone other than a Bushnell Authorized Service Department.

Any return made under this warranty must be accompanied by the items listed below:

- 1) A check/money order in the amount of \$10.00 to cover the cost of return postage and handling
- 2) Name and address for product return
- 3) An explanation of the defect
- 4) Proof of Date Purchased
- 5) Product should be well packed in a sturdy outside shipping carton, to prevent damage in transit, with return postage (\$10.00) to the address listed below:

**IN U.S.A. Send To:**

Bushnell Outdoor Products  
Attn.: Repairs  
8500 Marshall Drive  
Lenexa, Kansas 66214

**IN CANADA Send To:**

Bushnell Outdoor Products  
Attn.: Repairs  
A East Pearce Street, Unit 1  
Richmond Hill, Ontario L4B 2M9

For products purchased outside the United States or Canada please contact your local dealer for applicable warranty information. In Europe you may also contact Bushnell at:

Bushnell Germany GmbH  
European Service Center  
Mathias-Brüggen-Str. 80  
GERMANY  
D- 50827 Köln  
Tel: +49 221 995568-0  
Fax: +49 221 995568-20

This warranty gives you specific legal rights.  
You may have other rights which vary from country to country.

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**Customer Service: (800) 423-3537**

IN NO EVENT SHALL BUSHNELL BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE, OR INABILITY TO USE THIS PRODUCT OR FROM DEFECTS IN THE PRODUCT.

Some states do not allow the exclusion of incidental or consequential damages, so the above limitations may not apply to you.



**Bushnell®**  
**OUTDOOR**  
**TECHNOLOGY**

INNOVATION THAT THRIVES OUTSIDE

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